

ABSTRACT

A directional coupler system includes an input diplex filter for splitting an input signal into a high band signal and a low band signal, a high band directional coupler for which the high band signal is coupled to an input of the high band directional coupler, a low band directional coupler for which the low band signal is coupled to an input of the low band directional coupler, a tap diplex filter coupled to a tap of each of the high band directional coupler and low band directional coupler and an output diplex filter for receiving and combining a high band signal output from the high band directional coupler and a low band signal output from the low band directional coupler. The coupler system improves the bandwidth in a coaxial cable transmission system